



## PATUXENT RIVER, MD

NAVAIR Patuxent River is one of eight Naval Air Systems Command sites that provides the highest standard in warfare technology through supremacy in naval aviation technologies. Patuxent River is home to both the Naval Air Systems Command headquarters and the Naval Air Warfare Center Aircraft Division, and is host to more than 50 tenants including three services, federal agencies and private industry.

### MISSION

NAVAIR Patuxent River's (Aircraft Division including the Webster Field Annex) mission is to support NAVAIR in providing the warfighter with absolute combat power through technologies that deliver dominant combat effects and matchless capabilities. Pax River provides effective and affordable integrated warfare systems and life cycle support by performing research, development, test and evaluation, engineering and fleet support for manned and unmanned aircraft, engines, avionics, aircraft support systems and ship/shore/air operations.

### PRODUCTS AND SERVICES

#### AIR COMBAT SYSTEMS RDT&E

- ◆ Full range of acquisition support for air combat systems ranging from basic research to in-service engineering and logistics (a unique service within the Department of Defense)
- ◆ NAWCAD Test Wing Atlantic program support including U.S. Naval Test Pilot School, Air Test and Evaluation Squadron Two Zero, Air Test and Evaluation Squadron Two One and Air Test and Evaluation Squadron Two Three

#### AIR VEHICLE RESEARCH AND DEVELOPMENT

- ◆ The Air Vehicle Materials program and product support includes landing gear composite, organic coatings and surface interactions and the adhesive bonding & technology lab
- ◆ Air Vehicle test and materials analysis/non-destructive testing, failure analysis, engineering investigations, composite repair and coating evaluations
- ◆ Dynamic Radar Cross Section Measurements services and program support
- ◆ Installed engine performance and integrated airframe-engine testing; propulsion systems evaluation

#### AIRCRAFT PLATFORM SYSTEMS INTEGRATION

- ◆ Air Combat Environment Test & Evaluation in virtual battlespace for Electronic Warfare
- ◆ The Atlantic Range Facility provides Electronic Warfare flight test capabilities, including EW sensor stimulation and measurements
- ◆ State of the art Electromagnetic Environmental Effects (E<sup>3</sup>) testing to ensure all aircraft avionics are compatible with other systems onboard the aircraft and with their intended operational environment
- ◆ Avionics/Mission and Sensors technical support including antenna, ship/shore communications and electronics systems, combat and communication systems, and ship's signal exploitation space equipment suites testing, and in-service engineering for AEGIS CG 47 and DDG 51 class ships.
- ◆ Catapult and Arresting Gear complex for carrier suitability testing

## PEOPLE

With a work force of more than 10,700 personnel, NAVAIR Patuxent River employs 7,600 civilian employees and about 3,100 active-duty military personnel. Patuxent River is the largest employer in St. Mary's County.

## FACILITIES

The air combat systems development functions conducted at Patuxent River require sea level conditions, a varied climate and a location near the sea to produce the test conditions essential for naval aviation technology development. The climatic and geographic conditions unique to Patuxent River are crucial for the proper performance testing of both fixed-wing and rotary-wing vehicles in preparation for operations in the maritime environment. Facilities facts include:

- ◆ Patuxent River encompasses over 13,800 acres and houses 935 buildings (including 10 hangars, totaling more than 8.76 million square feet), with five active runways (longest is 11,800 feet), and possesses 5,000 square miles of controlled airspace of which 780 square miles are restricted.
- ◆ Estimated value of the facilities located on Patuxent River and Webster Field is \$2.8 billion.

## ACCOMPLISHMENTS

- ◆ The Atlantic Test Range's Advanced Dynamic Aircraft Measurement System Team received (ANSI-Z-540) certification from the National Institutes of Standards and Technologies for radar signature measurements.
- ◆ The Lockheed Martin X-35C and Boeing X-32B Joint Strike Fighter concept demonstrator's successfully completed all government flight test requirements at NAWCAD Patuxent River.
- ◆ In April 2001, the AH-1Z Super Cobra arrived and actively engaged in flight testing to validate the flying qualities of both AH-1Z and UH-1Y rotary wing aircraft.
- ◆ The P-3 "Hairy Buffalo" real time search and tracking system was successfully developed and tested at Patuxent River. The P-3 "Hairy Buffalo" system allows warfighters to create real time stand-off images of surface targets allowing strike aircraft to hunt and kill mobile surface enemies.
- ◆ The F/A-18E/F Super Hornet successfully conducted follow-on flight testing; supporting all program objectives.
- ◆ The X-31 thrust-vector technology demonstrator completed its first flight period for the Navy VECTOR test program. The VECTOR is a joint venture program with partnership between the U.S Navy, Germany's federal defense procurement agency, European Aeronautic Defence and Space Corporation and Boeing Aerospace.

### FOR MORE INFORMATION, CONTACT:

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